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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/621,772

07/17/2003

Wayne Patrick O'Brien

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EXAMINER

WEI, ZHENG

ART UNIT

PAPER NUMBER

2192

NOTIFICATION DATE

DELIVERY MODE

04/17/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/621,772	<b>Applicant(s)</b> O'BRIEN, WAYNE PATRICK	
	<b>Examiner</b> ZHENG WEI	<b>Art Unit</b> 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**Detailed Action**

***Remarks***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/26/2007 has been entered.
2. This office action is in response to the amendment filed on 11/26/2007.
3. Claims 1, 7, 13, 19-21, 25, 29, 33-35, 41, 47 and 53-54 have been amended.
4. Claims 1-54 remain pending and have been examined.

***Response to Arguments***

5. Applicant's arguments filed on 11/26/2007, in particular on pages 23-24, have been fully considered but they are not persuasive. For example:
  - At page 23, section 102 Rejection, the Applicants submit that Little fails to disclose, or even teach or suggest the elements newly added to claims 35-54 including the steps placing line, arrow, folder and note to represent model structural view.

*However, the Examiner respectfully disagrees.*

*As Little disclosed in Figures 11-13, 15-28, these screen shots clearly indicate that line, arrow, folder and note are used in the UML model design tool (Rational Rose) in different views. Therefore, Little does disclose said step as the Applicant argued for claim 35-54.*

- At page 23-24, section 103 Rejection, the Applicants submit that Garloff fails to disclose accessing a plurality of domain rules for a military theory which are generated from a “C4ISR” system.

*However, the Examiner’s position is that the claim language merely discloses a special system (C4ISR) to generate rules for a military theory without pointing out detail difference between C4ISR system and general computer system or new/improvement methods are used to generate rules for military theory. The Examiner thanks the Applicants providing the reference for the definition about term “military theory” which is “theory pertaining to the military”, but it is still insufficient to overcome the prior art. Therefore, the rules generated by the “C4ISR” system can also be reasonable interpreted as the same rules generated by the general computer system.*

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 35-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Little (Little et al., US 2002/0091990).

Claim 35:

Little discloses a method for initiating display of a view of a computer program design, comprising:

- accessing a plurality of artifacts of a computer program design, each artifact of the plurality of artifacts expressed using a modeling language (see for example, Fig.3, Fig.4 and related text, also see p.6, paragraph [0127], UML);
- receiving a selection of a first view from a plurality of views, each view of the plurality of views associated with a display of a subset of the plurality of artifacts (see for example, Fig.11 Logical View and related text);
- organizing a first subset of artifacts for display according to the first view, the first subset comprising a particular artifact, the first set organized by: (see for example, Fig.16, Fig.17 and related text);
- placing a plurality of folders in the first view, a folder representing a package used to organize the computer program design (see for example, Fig.11, “Logic view” and related text);
- placing a plurality of notes in the first view, a note representing information used during the computer program design(see for example, Fig.11, “Logic view” and related text);

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- placing an arrow between folders representing cross-referenced packages (see for example, Fig.11, “Logic view” and related text);
- placing a line between a note and a folder to which the note belongs (see for example, Fig.11, “Logic view” and related text)
- initiating display of the first subset of artifacts according to the first view (see for example, Fig.16-17 and related text);
- receiving a selection of a second view from the plurality of views (see for example, Fig.12, Component View and related text);
- organizing a second subset of artifacts for display according to the second view, the second subset comprising the particular artifact (see for example, Fig.12, right side panel and related text); and
- initiating display of the second subset of artifacts according to the second view (see for example, Fig.12, right side panel and related text).

Claim 36:

Little further discloses the method of claim 35, wherein an artifact of the plurality of artifacts comprises a requirement of the computer program design (see for example, p.6, paragraph [0113], logical view, logical package).

Claim 37:

Little also discloses the method of claim 35, wherein:

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- receiving the selection of the first view further comprises receiving a selection of a high-level artifact view (see for example, fig.16-17, left panel, User Cases View, high lighted “Main” and related text); and
- organizing the first subset of artifacts further comprises organizing a plurality of high-level artifacts of the plurality of artifacts according to the high-level artifact view (see for example, fig.16-17 and related text).

Claim 38:

Little further discloses the method of claim 35, wherein:

- the first view comprises a high-level artifact view, the high-level artifact view comprising a structural view (see for example, Fig.16, fig.17 and related text); and
- the second view comprises the structural view (see for example, Fig.12, Component View and related text).

Claim 39:

Little further disclose the method of claim 35, wherein:

- the first view comprises a high-level artifact view, the high-level artifact view comprising a behavioral view (see for example, Fig.20, and related text); and
- the second view comprises the behavioral view (see for example, Fig.22 and related text).

Claim 40:

Little also discloses the method of claim 35, wherein:

- the first view comprises a structural view, the structural view comprising an active class (see for example, Fig.17 and related text, also see p.10, paragraphs [0187]-[0192]); and
- the second view comprises a behavioral view, the behavioral view comprising the active class (see for example, Fig.22 and related text, also see p.11, paragraph [0208]).

Claims 41-46 and 53:

Claims 41-46 and 53 are system version for performing the claimed method as in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, p.17, right side column, line 65 – p.19, right side column, line17). Therefore, Little's teachings also anticipate claims 41-46 and 53.

Claims 47-52:

Claims 47-52 are a logic (procedure/method) version for performing the claimed method in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Little's teachings also anticipate claims 47-52.



Claim 54:

Claim 54 is another method version for performing the claimed method in claims 35-40 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Little's teachings also anticipate claim 54.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable by Garloff (Garloff et al., US 5,699,310).

Claim 1:

Garloff discloses a method, a system and procedure logic for designing a computer program, comprising:

- accessing a plurality of domain rules, each domain rule (GENERATION KNOWLEDGE BASE) being invariant, the plurality of domain rules generated according to one or more patterns of a command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) system (computer system) (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASES INCLUDE: GENERATION RULES" and related text;

- also see Fig.2, "OPEN KBASE(S) AND DISPLAY INITIAL WINDOW" and related text; also see col.31, line 27-col.32, line 18 about computer system)
- displaying a plurality of business rules, each business rule (DESIGN KNOWLEDGE BASES and SPECIFICATIONS KNOWLEDGE BASE) being variable, the plurality of business rules comprising one or more rules of engagement (rules in KBASES)(see for example, Fig.2, "OPEN KBASE(S) AND DISPLAY INITIAL WINDOW" and related text);
  - selecting one or more business rules of the plurality of business rules in response to a user selection (see for example, Fig.2, "CHANGE KBASE" and Fig.3 and related text at col.9, lines 25-31);
  - customizing the one or more business rules (see for example, Fig.3,"CHANGE A KBASE" and related text);
  - associating the one or more business rules with a procedure (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "INHERITANCE ENGINE" and related text);
  - associating the domain rules with the procedure (see for example, Fig.1A, Fig.1B, "GENERATION KNOWLEDGE BASE" and "INHERITANCE ENGINE" and related text);
  - displaying a model representing the procedure (see for example, Fig.1A "FULLY INHERITED VIEW OF OBJECTS" and related text); and

- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.1A, “GENERATION PROCESS”, “SOURCE CODE” and related text).

But does not explicitly disclose the rules are for a military theory. However, because the term/definition about military theory has not been defined, the limitation of the military theory has no impact to the claim and it is obvious that cited rules from Garloff could be the rules for military theory or for any other theories that are non-military theory. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to design, access and display a plurality of domain/business rules also can be applied for a military theory.

Claim 2:

Garloff further discloses the method of claim 1, further comprising:

- collecting the domain rules and the business rules (see for example, Fig.1A, Fig.1B, “DESIGN KNOWLEDGE BASES”, “SPECIFICATIONS KNOWLEDGE BASE”, “GENERATION KNOWLEDGE BASES”, “INHERITANCE ENGINE” and related text);
- allocating the domain rules and the business rules to a plurality of use cases;
- realizing the use cases (see for example, Fig.7A and related text); and
- assessing the domain rules and the business rules in accordance with the realization (see for example, Fig.2, “CHECK SPECIFICATIONS”, Fig.6 and

related text).

Claim 3:

Garloff also discloses the method of claim 1, further comprising:

- checking a syntax of the code (see for example, Fig.6 and related text, also see col.9, line 66- col.10, line 2, “reviewing Methods for proper syntax”); and
- providing a notification if a syntax error is detected (see for example, Fig.6, “DISPLAY ERRORS” and related text).

Claim 4:

Garloff further discloses the method of claim 1, further comprising:

- checking a logical consistency of the code (see for example, Fig.6, “CHECK ATTRIBUTES AND METHODS FOR REFERENCES AND CORRECTNESS. DISPLAY ERRORS” and related text); and
- providing a notification if a logical inconsistency is detected (see for example, Fig.6, “DISPLAY ERRORS” and related text).

Claim 5:

Garloff also discloses the method of claim 1, further comprising:

- checking a compatibility between the model and the code (see for example, Fig.6, “CHECK ATTRIBUTES AND METHODS FOR REFERENCES AND CORRECTNESS. DISPLAY ERRORS” and related text); and

- providing a notification if an inconsistency is detected (see for example, Fig.6, “DISPLAY ERRORS” and related text).

Claim 6:

Garloff further discloses the method of claim 1, wherein the model is expressed according to a modeling language (see for example, col.5, lines 47-53, “Modeler’s language”).

Claims 7-12:

Claims 7-12 are a logic (procedure/method) version for performing the claimed method in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff’s teachings also anticipate claims 7-12.

Claims 13-19:

Claims 13-19 are system version for performing the claimed method as in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.31, line 27 – col.32, line18). Therefore, Garloff’s teachings also anticipate claims 13-19.

Claim 20:

Claim 20 is another method version for performing the claimed method in claims 1-6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, Garloff's teachings also anticipate claim 20.

Claim 21:

Garloff discloses a method for managing rules for designing a computer program, comprising:

- accessing a plurality of rules for a military theory (see for example, Fig.1A, Fig.1B, "DESIGN KNOWLEDGE BASES", "SPECIFICATIONS KNOWLEDGE BASE", "GENERATION KNOWLEDGE BASES", "INHERITANCE ENGINE" and related text);
- identifying required the rules to separate a plurality of domain rules of a military theory from a plurality of business rules, each domain rule being invariant, each business rule of a military theory being variable (see for example, Fig.1B, "INHERITANCE ENGINE" and related text, also see Fig.3, "DISPLAY LIST OF KBASES" and related text);
- storing the business rules (see for example, Fig.3, "CLOSE/OPEN ALL KBASES" and related text); and
- providing a business rule from the stored business rules in response to a request for the business rule (see for example, Fig.3, "DISPLAY LIST OF KBASES" and related text).

but Garloff does not explicitly disclose accessing a plurality of legislated laws associated with the military theory. However, it is obvious that the legislated laws associated with the military theory are some kinds of different rule/requirements for the military. The method used by Garloff to access KBASES which contains generation rules can also be used to accessing laws associated with the any theory/rule/requirement including legislated laws associated with the military theory.

Claim 22:

Garloff further discloses the method of claim 21, further comprising:

- customizing the provided business rule (see for example, Fig.3, “CHANGE A KBASE” and related text);
- associating the customized business rule with a procedure (see for example, Fig.4, “CREATE FULLY INHERITED VIEW OF OBJECT” and related text);
- and
- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.2, “GENERATE”, Fig.1C, “GENERATION PROCESS”, Fig.7A and related text)

Claim 23:

Garloff also discloses the method of claim 21, further comprising:

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- associating the domain rules with a procedure (see for example, Fig.1A, Fig.1B, “GENERATION KNOWLEDGE BASE” and “INHERITANCE ENGINE” and related text); and
- generating a code corresponding to the procedure in order to design a computer program (see for example, Fig.2, “GENERATE”, Fig.1C, “GENERATION PROCESS”, Fig.7A and related text).

Claim 24:

Garloff further discloses the method of claim 21, further comprising:

- allocating the domain rules and the business rules to a plurality of use cases (see for example, Fig.1A, Fig.1B, “GENERATION KNOWLEDGE BASE” and “INHERITANCE ENGINE” and related text; also see Fig.7A and related text);
- realizing the use cases (see for example, Fig.7A, “WRITE SOURCE MODULES TO DISK FILES” and related text); and
- assessing the domain rules and the business rules in accordance with the realization (see for example, Fig.6 and related text for checking).

Claims 25-28 and 33:

Claims 25-28 and 33 are system version for performing the claimed method as in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.31, line 27 – col.32, line18). Therefore, they are also obvious by Garloff's teachings.



Claims 29-32:

Claims 29-32 are a logic (procedure/method) version for performing the claimed method in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, they are also obvious by Garloff's teachings.

Claim 34:

Claim 34 is another method version for performing the claimed method in claims 21-24 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Therefore, it is also obvious by Garloff's teachings.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-2059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ZW/

/Tuan Q. Dam/  
Supervisory Patent Examiner, Art Unit 2192